City of Newport Beach - Building Department

BUILDING CODE POLICY

Effective Date	Subject	Policy No.
November 14, 2005	Detectable Warnings Color Contrast	CBC Section 1133B.8.3

Currently we use the modification process to approve these products. The color contrast approval is done by the inspector for two reasons. First, the applicant will not be required to bring in a sample of the product. Second, office staff cannot evaluate the product color to judge contrast without knowing what the adjoining surface looks like. Section 1133B.8.3 of the CBC addresses the color contrast issue as follows: "The detectable warning shall contrast visually with adjoining surfaces, either light on dark or dark on light". In addition, "Color yellow conforming to Federal Color No. 33538, as shown in table IV of standard No. 595B. Where the color value contrast between the yellow warning and the main walking surface is less than 70 percent, a 1-inch-wide black strip shall separate the yellow warning from the main walking surface. Contrast shall be determined by:

Contrast = $[(B1-B2/B1)] \times 100$ percent where B1 = light reflectance value of the lighter area and B2 = light reflectance value of the darker area.

Contrast is defined in the Webster's third addition dictionary as "to compare in respect of differences," "exhibit somewhat marked or noticeable difference or opposition," "a relationship accentuating the differences rather than the similarities," and "diversity of adjacent elements in a work of art - opposed to gradation, transition," etc...

Our policy shall be as follows:

Federal Color No. 33538 will be acceptable. The 70% requirement shall be enforced. If some one desire to use a different color other than the Federal yellow then a color contrast of different family of colors other than the same shade will be acceptable consistent with the code language of light on dark and dark on light above. Otherwise an analysis similar to the above with a contrast value exceeding 70% must be established.

Jay Elbettar, Building Director	